State of Alaska Department of Fish and Game Nomination for Waters Important to Anadromous Fish USGS Quad Nome C-/ AWC Volume SE SC SW W AR IN Anadromous Water Catalog Number of Waterway 333-10-11200 - 2008 DRU CREEK USGS name X Local name Name of Waterway Addition \_\_\_\_ Deletion \_\_\_\_ Correction \_\_\_\_ Backup Information \_\_\_\_ For Office Use 340 Nomination # \_\_\_\_ Regional Supervisor Revision Year: Revision to: Atlas Catalog Both Revision Code: Drafted OBSERVATION INFORMATION Rearing Migration Anadromous Species Date(s) Observed Spawning UARDSN IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as any other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc. Comments: ALASKA DEPT. OF FISH & GAME NOV 6 8 1993 Name of Observer (please print) REGION II MARITAT AND RESTORATION Signature: Address:

This certifies that in my best professional judgement and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist:

Rev. 7/93

## NORTON SOUND FISHERIES INVESTIGATIONS

Cooperative BLM/ADF&G Habitat Management Program

Stream Name:	DRY CREEK	Location:	TRAP S	ITE #/			
Date: 8/10/93	Time: _//	30 Surveyors:	MUSE	n			
Survey Method:							
	Trap	Other (Describe		)			
Stream Gradient:	% Sinuosity:	Dischar	ge: <b>45cfs</b>	W/D Ratio:			
Substrate:LB;							
Habitat (%): <u>30</u>							
Air Temp.	W	ater Temp	pF				
Fisheries Data: Species	Fork Length (mm)	Weight (gm)	Sex	Other			
	=========		========	==============			
DV	122	(0)					
DU	130						
DU	106						
DU	130						
DV	132						
שע	115						
DV	117						
DV	77						
DIV	112						
DV	141						
DV	79						
DIV	100						
Calla	95						
COHO	98						
COHO	10						
-							
:							
-							
SITE #1	1 OCATED	AUJACENT	70	ICY VIEW			
SUBDIVISION							

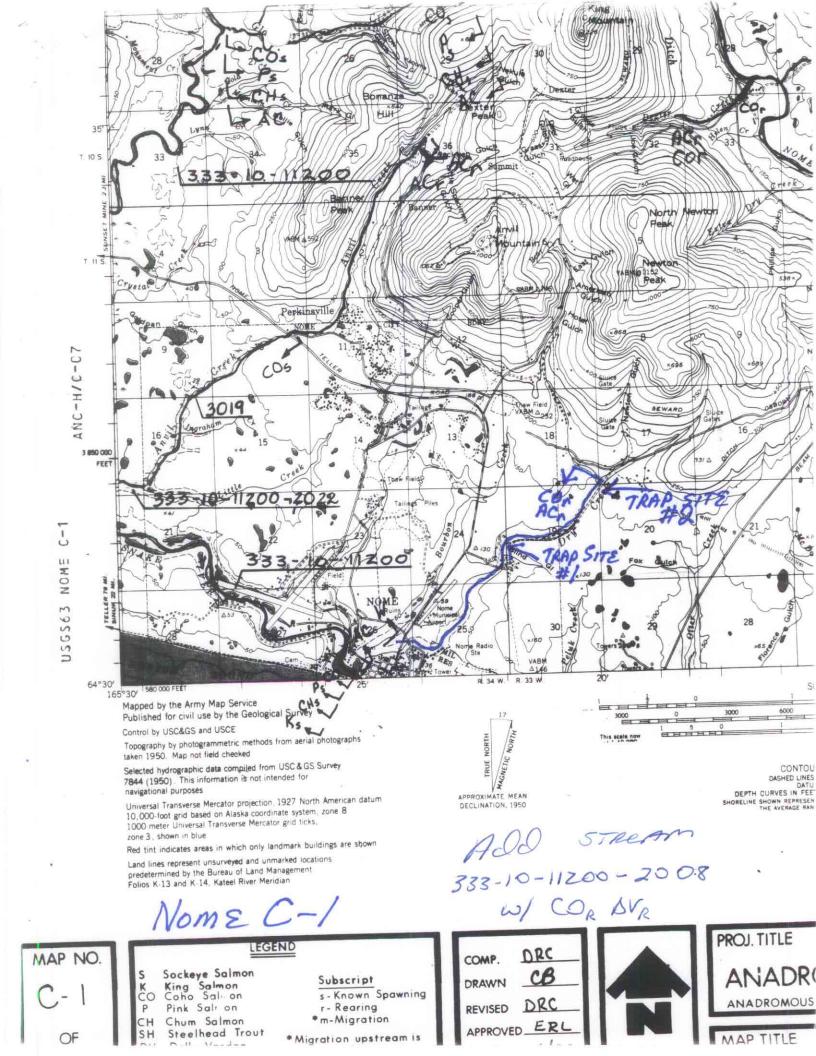
 $LB = Large \ Boulder \ C = Cobble \ LG = Large \ Gravel \ SA = Sand \ SB = Small \ Boulder \ R = Rubble \ SG = Small \ gravel \ SI = Silt$ 

BR = Bedrock

## NORTON SOUND FISHERIES INVESTIGATIONS

Cooperative BLM/ADF&G Habitat Management Program

Stream Name:	RY CLEEK	Location: _	TRAP	SITE #2
Date: 8/10/93	Time: _//	145 Surveyors:	MCCE	SAN
Survey Method:		Electroshocker		
	Trap	Other (Describe		)
				W/D Ratio:
Substrate:LB;				
Habitat (%): _36				
Air Temp.	W	ater Temp	I	оH
Fisheries Data: Species	Fork Length (mm)	Weight (gm)	Sex	Other
DU	114			
DV	125			
DU	116			
COHO	98			
COHO	89			
3				
4				
<del>//</del>				
-				
-	10			, , ,
SITE	OCATED	APPROX	1/2 m	le pelou
Dredge				le below
LB = Large Boulde SB = Small Boulde	$\begin{array}{ccc} \text{cr} & C = \text{Cobble} & L \\ \text{cr} & R = \text{Rubble} & S \end{array}$	G = Large Gravel G = Small gravel	SA = Sand SI = Silt	BR = Bedrock



## MEMORANDUM

## State of Alaska Department of Fish and Game

Lance Trasky To:

Regional Supervisor

Habitat and Restoration Division

Date:

October 25, 1993

File No:

Telephone Number:

451-6192

From: Alvin G. Ott

Regional Supervisor

Habitat and Restoration Division Department of Fish and Game

Subject:

1994 Anadromous

Catalog

Nominations

1994 Anadromous Catalog Nominations -- Justification for Designation of Juvenile Arctic Char (Dolly Varden) within the Seward Peninsula Area as Anadromous.

In response to your past requests, the following justification has been prepared for the record and reflects the factual basis for our determination that Seward Peninsula Arctic char (now classified as Dolly Varden) are predominately anadromous.

Arctic and sub-arctic char populations exhibit a number of life history patterns. This variation is further complicated in that char within a single drainage exhibit considerable "plasticity" in which sympatric and allopatric forms exist with different life history patterns. McCart (1980) describes four life history types. Three of these types (isolated stream residents, residual and anadromous) occupy stream habitats while the fourth type resides in lakes. The lake resident type is generally regarded to be a resident, nonanadromous, population (recent taxonomic clarification regards this morph type as a true Arctic char - other char morph types are now considered to be Dolly Vardens). However, McCart concludes that all three stream morphs cannot be distinquished by meristic The only way to distinguish anadromous and non-anadromous populations is to document the life history pattern of the fish in question or examine external characteristics such as parr-marks and coloration. All three stream morphs are identical for the first several years of life and are indistinguishable until either (1) anadromous populations undertake their first sea-ward migration (Age III to V) or (2) stream residents and residual morphs first reach sexual maturity (typically Age VI).

Within this framework, research conducted by Dr. Hans Norbeng of Norway is particularly noteworthy. Dr. Norbeng artifically spawned both resident and anadromous char as separate groups and presented the results of his research at the First International Symposium on Arctic char in 1981. Dr. Norbeng's research demonstrated that both matings between resident adults and matings between anadromous adults produced the same ratio of resident versus anadromous offspring. Regardless of whether resident or anadromous adults were spawned, the offspring produced were 30% small residents, 10% large residents, and 60% anadromous. He concluded that small and large resident char were analogous to precocious individuals in salmon populations and that the life history pattern that develops may be a function of gene ratio.

Based on these findings, we believe that a reasonable basis exists for concluding that a significant percentage of juvenile char collected in mainstem and tributary streams on the